Abstract of the Disclosure

A technique for encrypting an audio and/or video (A/V) stream, and more particularly, an apparatus and method for encrypting an A/V stream, and an apparatus and method for generating a random number necessary for generating an encryption key used in encrypting an A/V stream are disclosed. The apparatus includes a content processor, a random number generator, an encryption key generator, and a content encryptor. The content processor receives an audio/video stream, performs a predetermined processing operation on the audio/video stream, and generates and outputs predetermined data to be used for generating a random number. The random number generator receives the predetermined data from the content processor and generates the random number. The encryption key generator receives information comprising the random number and generates an encryption key using the information. The content encryptor encrypts the audio/video stream output from the content processor using the encryption key.